This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method for calculating a measure expression over a selected range of attributes, the measure expression including a relationship between a first measure and a second measure, the first measure corresponding to a first data type and the second measure corresponding to a second data type, the relationship defined by an arithmetic operation, the method comprising:

receiving a request to calculate the measure expression over the selected range of attributes;

responsive to receiving the request, querying a data store to retrieve a first data set ~~retrieving a first cache~~ corresponding to the first data type, the first data set ~~cache~~ including only data for the first measure over the selected range of attributes;

storing the first data set in a first cache;

generating a first index from the first cache, the first index including data for the first measure over the selected range of attributes common to the first data type and the second data type;

responsive to receiving the request, querying the data store to retrieve a second data set ~~retrieving a second cache~~ corresponding to the second data type, the second data set ~~cache~~ including only data for the second measure over the selected range of attributes;

storing the second data set in a second cache;

generating a second index from the second cache, the second index including data for the second measure over the selected range of attributes common to the first data type and the second data type;

performing the arithmetic operation on the data for the first measure from the first index and the data for the second measure from the second index to achieve resulting data; and

aggregating the resulting data over the selected range of attributes common to the first data type and the second data type.

2. (currently amended) The method of claim 1, wherein ~~retrieving~~ querying the data store to retrieve first data set ~~cache~~ comprises ~~retrieving~~ querying the data store to retrieve the first data set ~~cache~~ through a single access to a first data table.

3. (currently amended) The method of claim 1, wherein ~~retrieving~~ querying the data store to retrieve second data set ~~cache~~ comprises ~~retrieving~~ querying the data store to retrieve the second data set ~~cache~~ through a single access to a second data table.

4. (original) The method of claim 1, wherein generating the first index comprises generating the first index including data for the first measure aggregated according to attributes specific to the first data type.

5. (original) The method of claim 1, wherein generating the second index comprises generating the second index including data for the second measure aggregated according to attributes specific to the second data type.

6. canceled

7. canceled

8. (currently amended) A system for calculating a measure expression over a selected range of attributes, the measure expression including a relationship between a first measure and a second measure, the first measure corresponding to a first data type and the second measure corresponding to a second data type, the relationship defined by an arithmetic operation, the system comprising:

a ~~database~~ data store for storing a first data table including data for the first data type and a second data table including data for the second data type;

a processor for performing the following steps:

receiving a request to calculate the measure expression over the selected range of attributes;

responsive to receiving the request, querying the data store to retrieve a first data set ~~retrieving a first cache~~ corresponding to the first data type, the first data set ~~cache~~ including only data for the first measure over the selected range of attributes;

storing the first data set in a first cache;

generating a first index from the first cache, the first index including data for the first measure over the selected range of attributes common to the first data type and the second data type;

responsive to receiving the request, querying the data store to retrieve the second data set ~~retrieving a second cache~~ corresponding to the second data type, the second data set ~~cache~~ including only data for the second measure over the selected range of attributes;

storing the second data set in a second cache;

generating a second index from the second cache, the second index including data for the second measure over the selected range of attributes common to the first data type and the second data type;

performing the arithmetic operation on the data for the first measure from the first index and the data for the second measure from the second index to achieve resulting data; and

aggregating the resulting data over the selected range of attributes common to the first data type and the second data type.

9. (currently amended) The method of claim 8, wherein the first data set ~~cache~~ comprises data retrieved through a single access to the first data table.

10. (currently amended) The method of claim 8, wherein the second data set ~~cache~~ comprises data retrieved through a single access to the second data table.

11. (original) The system of claim 8, wherein the first index comprises data for the first measure aggregated according to attributes specific to the first data type.

12. (original) The system of claim 8, wherein the second index comprises data for the second measure aggregated according to attributes specific to the second data type.

13. canceled

14. (currently amended) A computer readable medium for calculating a measure expression over a selected range of attributes, the measure expression including a relationship between a first measure and a second measure, the first measure corresponding to a first data type and the second measure corresponding to a second data type, the relationship defined by an arithmetic operation, the computer readable medium having stored thereon computer executable instructions for performing the following steps:

receiving a request to calculate the measure expression over the selected range of attributes;

responsive to receiving the request, querying a data store to retrieve a first data set ~~retrieving a first cache~~ corresponding to the first data type, the first data set ~~cache~~ including data for the first measure over the selected range of attributes;

storing the first data set in a first cache;

generating a first index from the first cache, the first index including data for the first measure over the selected range of attributes common to the first data type and the second data type;

responsive to receiving the request, querying the data store to retrieve a second data set ~~retrieving a second cache~~ corresponding to the second data type, the second data set ~~cache~~ including data for the second measure over the selected range of attributes;

storing the second data set in a second cache;

generating a second index from the second cache, the second index including data for the second measure over the selected range of attributes common to the first data type and the second data type;

performing the arithmetic operation on the data for the first measure from the first index and the data for the second measure from the second index to achieve resulting data; and

aggregating the resulting data over the selected range of attributes common to the first data type and the second data type.

15. (currently amended) The computer readable medium of claim 14, wherein the computer executable instructions for ~~retrieving~~ querying the data store to retrieve first data set ~~cache~~ comprise computer executable instructions for ~~retrieving~~ querying the data store to retrieve the first data set ~~cache~~ through a single access to a first data table.

16. (currently amended) The computer readable medium of claim 14, wherein the computer executable instructions for ~~retrieving~~ querying the data store to retrieve second data set ~~cache~~ comprise computer executable instructions for ~~retrieving~~ querying the data store to retrieve the second data set ~~cache~~ through a single access to a second data table.

17. (original) The computer readable medium of claim 14, wherein the computer executable instructions for generating the first index comprise computer executable instructions for generating the first index including data for the first measure aggregated according to attributes specific to the first data type.

18. (original) The computer readable medium of claim 14, wherein the computer executable instructions for generating the second index comprise computer executable instructions for generating the second index including data for the second measure aggregated according to attributes specific to the second data type.

19. canceled